

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 15626/-/T	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/DE2003/003293	International filing date (day/month/year) 04 October 2003 (04.10.2003)	Priority date (day/month/year) 31 October 2002 (31.10.2002)
International Patent Classification (IPC) or national classification and IPC B60J 10/00		
Applicant SG TECHNOLOGIES GMBH		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
 - a. ☒ (sent to the applicant and to the International Bureau) a total of 5 sheets, as follows:
 - ☐ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
 - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
 - b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).
4. This report contains indications relating to the following items:
 - ☒ Box No. I Basis of the report
 - ☐ Box No. II Priority
 - ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - ☐ Box No. IV Lack of unity of invention
 - ☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - ☐ Box No. VI Certain documents cited
 - ☐ Box No. VII Certain defects in the international application
 - ☐ Box No. VIII Certain observations on the international application

Date of submission of the demand 14 May 2004 (14.05.2004)	Date of completion of this report 08 February 2005 (08.02.2005)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/DE2003/003293

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language _____, which is language of a translation furnished for the purpose of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):

- ☐ The international application as originally filed/furnished
- ☒ the description:
- pages _____ 2, 3, 5-8 _____, as originally filed/furnished
- pages* _____ 1, 4, 4a _____ received by this Authority on 07 October 2004 (07.10.2004)
- pages* _____ received by this Authority on _____
- ☒ the claims:
- pages _____, as originally filed/furnished
- pages* _____, as amended (together with any statement) under Article 19
- pages* _____ 1-7 _____ received by this Authority on 07 October 2004 (07.10.2004)
- pages* _____ received by this Authority on _____
- ☒ the drawings:
- pages _____ 1/2-2/2 _____, as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (specify): _____
- ☐ any table(s) related to sequence listing (specify): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (specify): _____
- ☐ any table(s) related to sequence listing (specify): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-7	YES
	Claims		NO
Inventive step (IS)	Claims	1-7	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-7	YES
	Claims		NO

2. Citations and explanations

Assuming that the problems of clarity outlined below (see point 4) are to be remedied, the subject matter of independent claim 1 and of dependent claims 2 to 7 can be regarded as novel, inventive and industrially applicable (PCT Article 33(2), (3) and (4)).

1. Prior art

Reference is made to US 4448430 A (document D1), which is considered to be the closest prior art. EP 0586073 (document D5), as listed in the search report, is also cited.

The essential difference between the claimed invention and the closest prior art is that in the present invention the longitudinal reinforcement for the hollow sealing profile is moulded as the profile is being extruded by modifying the extrusion orifice. D1 makes no mention of orifice modification during extrusion.

2. Technical problem addressed

The object of the invention is to improve the process for producing hollow extruded seals in such a way as to be able to achieve uniform dimensional stability even in curved

portions of the profile by simple and inexpensive means.

3. Solution to the problem

The invention solves the aforementioned problem by modifying the cross-section of the extrusion orifice during production of the extruded seal so that the reinforcement is not moulded continuously along the hollow extrudate. In this way it is a simple matter to add the reinforcement selectively in those portions of the hollow profile which will undergo sharp bending when the seal is fitted.

Document D1 discloses an extruded seal of the same type which also has reinforcements at the curvature points. This seal can also be extruded as a single piece, in which case the reinforcement can be made continuous. D1 does not specify how the reinforcements would look if they were not extruded continuously, and it is not obvious to a person skilled in the art.

The stated problem is solved by the combination of features specified in independent claim 1 of the present application, which combination is not known from the prior art.

4. Clarity

The application fails to meet the requirements of PCT Article 6 because claim 1 is not clear.

Independent claim 1 is directed to a product, namely an "extruded seal", and the preamble of the claim specifies various features of that product. The characterising part of the claim specifies features that relate only to the process for producing the extruded seal and are not clearly apparent in the finished product.

Document D5 (for example) defines a process which is different from the present invention and yet also produces an extruded seal with the features specified in the preamble of claim 1 of the present application.

In order to provide a clear definition of the invention, independent claim 1 should be directed to a production process rather than to the resulting product, and the dependent claims and also the statement of the problem in the description should be amended accordingly.